Background

In December 2007 the Sierra Nevada Conservancy (SNC) hosted a symposium to look at climate change and its anticipated impacts on the resources and communities of the Sierra. As an outgrowth of that symposium, the SNC launched a climate change initiative in June 2008, beginning with outreach to partners and stakeholders to identify what activities would be most useful and what role the SNC should play. Former Tahoe National Forest Supervisor Steve Eubanks conducted the initial research, with support from the Resources Legacy Fund Foundation. Eubanks concluded, and the Board concurred, that the most appropriate role for the SNC would be to use web-based information sharing, support of demonstration and other projects, education and neutral convening as tools to address critical issues in the Region as they relate to climate change, including water, forests, fire and renewable energy.

In August 2008, Natural Resources Secretary Mike Chrisman, on behalf of Governor Schwarzenegger, called for the development of a specific Sierra-based Climate Change Action Plan (Click link to view document) by the SNC in conjunction with the Tahoe Conservancy, the Forest Service, and other federal, state and local agencies and stakeholder groups in the Region.

Based on direction provided by the Board on this issue in October 2008, the SNC brought on Theresa Parsley, a retired annuitant with experience in policy and program development, project management, and stakeholder processes, to assist in the development of a Sierra-based climate action plan to merge these two efforts by helping to guide both SNC-specific and larger collaborative climate change activities in the Region.

Since then the SNC has taken additional actions, including:

<u>January/February 2009</u>: SNC began soliciting additional input on potential climate change actions from key stakeholder partners and began development of the Sierra Nevada Climate Action Plan and its component documents.

March/April 2009: SNC revised its Strategic Plan and FY 2009-10 draft grant guidelines taking into consideration implications and responsibilities related to climate change, such as working with agencies and other partners to educate the public about, plan for, and monitor effects of climate change on the Region. During this timeframe staff also completed the components of its draft Green Initiative which was created as part of its "Greening the SNC" effort to measure, report, certify, and reduce its own operational emissions. The SNC Green Initiative is attached as an Appendix to the draft Sierra Nevada Climate Action Plan.

<u>July/August 2009</u>: SNC staff completed the initial draft action plan and began gathering comments on the proposed goals and objectives as well as specific proposed action items from key partners including the US Forest Service, the Tahoe

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Conservancy, the National Park Service, and various partner/stakeholder organizations.

Current Status

As directed by the Board, the initial focus of this plan is on the Regional issues of fire, forest, water and renewable energy, identifying and targeting ideas or actions for which consensus already exists, and using and leveraging available resources where possible. The following summarizes the key points in the draft plan, which is attached in its entirety here.

Proposed Strategies

Specifically, the strategies that are proposed to guide the 2009 Sierra Nevada Climate Action Plan are:

- Promoting land management practices that contribute to forest health, resiliency, and the reduction of catastrophic wildfire threats;
- Addressing water quality and supply; increasing "above the dam," basin-wide natural water storage systems, such as meadow restoration, for storage and groundwater recharge;
- Optimizing and securing carbon sequestration by forests, woodlands, and working landscapes;
- Promoting clean and sustainable energy production (including but not limited to biomass to energy and biomass to fuel production) and energy efficiency program development throughout the Region;
- Reduction of greenhouse gas emissions Region-wide through support for community efforts and local government energy efficiency and land use efforts:
- Educating decision-makers and policy-makers, as well as community members, on the climate related benefits provided by the Sierra Nevada Region and the Region's potential climate related losses;
- Promoting continued development of Region specific climate research; and
- Pursuing and promoting funding sources to achieve the goals and objectives of the Sierra Nevada Climate Action Plan.

Because more Regional needs exist in these issue areas than there are resources available to address them, the Sierra Nevada Climate Action Plan has further focused on specific, high urgency, multi-benefit actions in each of these areas of concern, such as:

1. Fire/Forest: Because climate change and its predicted temperature increases throughout this century are expected to increase the intensity and duration of uncontrolled, catastrophic wildfires in the Region, a primary focus of the plan is on reduction of dangerous levels of fire fuels through application of sustainable land management practices. This plan also supports collaborative planning to help reduce traditional Regional conflict and resistance to changes in forestry land management practices, as well as considering the impact of wildfire on forest and rangeland carbon sequestration. The plan further supports additional

voluntary land conservation easements and purchases in order to protect and enhance existing

carbon sequestration, land and resource values, and to provide contiguous habitat and migration corridors as an adaptation strategy.

- 2. Water: One of the most critical anticipated impacts of climate change on the Sierra and the state is the reduction in Sierra snowpack and resulting impacts to natural water storage and delivery. As a result the Sierra Nevada Climate Action Plan focuses on improving natural water storage systems by supporting "above the dam" water storage, such as meadow restoration. Restoration of meadows is not only extremely cost-effective, but it captures the co-benefits of improving ecological health and restoring and extending habitat as well as providing an effective adaptation strategy, in that it can facilitate species migration in response to a warming climate. The Sierra Nevada Climate Action Plan also calls for SNC to continue its efforts to improve water quality and overall supply by promoting the development of Integrated Regional Water Management Plans (IRWMP) across the Region, as well as promoting events that encourage urban legislators and policy-makers to visit the watersheds to better understand the importance of the Sierra in providing clean, ample water to California's urban centers and agricultural industry.
- 3. Renewable Energy Biomass: Closely connected with the fire threat reduction effort is the beneficial use of biomass to create climate-friendly, local renewable energy. Proposed actions in this area include supporting the development of biomass-to-energy as well as biomass-to-fuels projects, which can also provide potential funding sources for increased sustainable land management practices. The potential economic development benefits of these projects also support the SNC's program goal to "Assist the Regional economy" by re-vitalizing communities impacted by by the closure of mills throughout the Sierra region, and they offer the statewide benefit of supporting achievement of California's renewable energy portfolio standard and low carbon fuel standard goals, as well.
- 4. Renewable Energy Energy Efficiency: In the area of energy the Sierra Nevada Climate Action Plan also promotes the development of energy efficiency programs at the community and local government level. Support is proposed through education and outreach efforts to community groups and local government entities in the region. Further supporting the focus of renewable energy development and energy efficiency efforts is the fact that federal and state funding sources have been developed that may potentially help fund near-term renewable energy and energy conservation projects.

Recommended Implementation and Accountability Measures

The SNC proposes to help guide the Sierra Nevada Climate Action Plan implementation effort for the first year by providing a dedicated Climate Change Initiative Coordinator, additional funding of up to \$20,000 for the development and publication of the Sierra

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Nevada Climate Change Web site, and additional in-kind funding and support for publication materials development and office and related logistical support. The Sierra Nevada Climate Action Plan further proposes that additional resources needed for implementation be sought from partner organizations in the Region, and that any activities proposed outside of what the SNC can reasonably do with its current staff be dependent upon receiving the necessary level of financial support and/or staffing collaboration.

Assuming necessary support is provided, it is anticipated that nearly all action items suggested within this plan will be completed by the end of 2011. Efforts to gather input on the plan through the public comment period will include assessing the ability and interest of partners to provide the necessary resources.

In order to ensure accountability the plan proposes an annual review and performance report on climate action measures and outcomes. The SNC Annual Report will include metrics that measure specific outcomes of its efforts.

In addition, the draft Sierra Nevada Climate Action Plan also anticipates that the focus of its efforts may change over time. The plan recognizes that this is a starting point – that research, policy, and regulatory programs in this area are rapidly evolving. For this reason, in order to ensure the Climate Action Plan's perspective continues to address the most relevant research findings and policy guidelines, it is proposed that a full plan review be completed every two years.

Next Steps

This draft plan was posted and distributed for general public comment on September 9, 2009. That public comment period will continue through October 30, 2009. Boardmembers are invited to submit individual comments as part of the public comment period, in addition to any general input they provide at this Board meeting. Additional information gathered during the comment period will be compiled into a final draft plan to be submitted for final consideration and approval at the December 2009 Board meeting.

Unless otherwise directed, the next steps for the SNC in completing the Sierra Nevada Climate Action Plan are:

- Gather and incorporate Board and stakeholder input
 - Due for completion November 2009
- Report to SNC Board for final action and direction
 - o Due December 2009
- Appoint Sierra Nevada Climate Change Initiative Coordinator
 - o Anticipated January 2009
- Initiate Sierra Nevada Climate Action Plan Implementation Phase
 - Anticipated February 2009

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Recommendation

This is an informational item, and as such no action is required at this time; however, staff welcomes any comments or other input the Board may have related to the draft plan and its contents at this time.